

**ABSTRACT**Random Early Detect and Differential Packet AgingFlow Control in Switch Queues

5 Flow control is provided for a packet switch. An incoming packet is classified according to its priority based on predefined rules to produce a weight value based on the priority of the packet. A lifetime value associated with the packet is produced based on the weight value and the queue occupancy in a queue to  
10 which the packet is assigned. The packet is discarded if its associated lifetime value is less than or equal to a threshold value. Otherwise the packet and associated lifetime value are sent to the queue. The lifetime value is periodically changed and compared to a threshold value. The packet is removed from the queue when its lifetime value reaches the threshold value.